THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. X.] WEDNESDAY, MAY 21, 1834. [NO. 15.

# NITRATE OF SILVER IN SOME INFLAMMATORY AFFECTIONS OF THE MUCOUS MEMBRANES OF THE MOUTH AND FAUCES.

BY R. T. HUNT, ESQ.

AT a time when the exhibition of mercury is recommended in so many complaints, the following account of the treatment of some of the evil consequences which supervene upon the affection of the system, produced by this powerful agent, will not, I trust, be wholly unacceptable. Nor are the bad effects to which I allude dependent merely upon the inordinate use of this remedy ; small doses, in some instances, having caused ptyalism, when no such influence on the system was intended by the prescriber. Having frequently observed the great length of time which generally elapsed before ulcerations of the mucous membrane of the mouth, occurring during ptyalism, would yield to the common astringent or stimulant applications, although assisted by that constitutional treatment which the circumstances of the case appeared to indicate ; and having also had numerous opportunities of estimating the comparative advantages of different stimulants, when applied to the mucous surface of the conjunctiva, owing to my connection with the Eye Institution ; I was induced, by the analogy of structure existing between these membranes, to conclude that the nitrate of silver, which has proved, after repeated trials, the best stimulant in certain affections of the conjunctiva, might be resorted to with advantage in similar diseases of the mucous membrane of the *mouth*.

In the first case in which this plan was adopted, the mouth had been only three days affected ; there was great tumefaction of the mucous surface of the lips, gums, and inside of the cheeks, which were also suffering from several small sloughy ulcerations ; and several quarts of fluid had drained from the mouth during the day. The ulcers were freely touched with the solid nitrate. Next day the swelling had entirely subsided, the sloughs separated, and the salivary secretion was very much diminished. A single repetition, after an interval of two days, was sufficient to restore the affected parts to a healthy state. The constitutional treatment consisted of saline purgatives and diluent beverage. Since that period, I have applied the same remedy, with an equally successful result, in a considerable number of cases, in all of which ulceration had commenced. This effect has indeed occurred so uniformly, as to justify me in recommending the treatment with confidence. The following was one of the most severe affections of this description :—

W. A., a painter, æt. 26, was seized, September 1st, 1832, with all the symptoms of colica pictonum, which yielded, in the course of three days, to the employment of general bleeding, purgatives, and the external application of spt. terebinth. to the abdomen. During this time he took twenty-six grains of calomel, in combination with purgatives, which acted powerfully on the bowels.

3d.—In the evening, his mouth having become slightly affected, he was ordered saline purgatives, and a solution of the nitrate as a lotion.

4th.—As the lotion had discolored the teeth, the solutio alum. cum tr. capsici was substituted.

5th.—Several small sloughy patches appeared on the inside of both lips, which, together with the gums and cheeks, were much swollen, and the salivary secretion very copious. The nitrate was freely applied to the ulcerated parts of the lips.

6th.—Lips much better; mucous membrane of both cheeks sloughy; tongue very much enlarged, and covered with sloughy ulceration, preventing, by its size, any ocular examination of the fauces. But reasoning from the difficulty of swallowing, and the pain caused by pressure on the larynx, would lead to the conclusion that the mucous membranes of the fauces, and upper parts of the pharynx, were in a similar condition. There is now an immense draining of salivary fluid, and such a degree of suffering that he cannot be prevailed on to take anything except water and his medicine. Nitrate, applied to the lower surface of the tongue, and inner surface of the cheeks, for the first time, and repeated to the worst lip.

7th.—The nitrate having been too freely applied, and having, consequently, caused considerable pain for some hours afterwards, was not repeated to-day, but he was ordered to use a warm opiate lotion.

8th.—Much better, except the under surface of the tongue, which had not become inflamed until the 6th; swelling and salivary secretion much diminished. Nitrate applied sparingly to the tongue. Opiate lotion continued.

9th.—Improving; no farther occasion for the nitrate.

12th.—To-day I met him walking out. Mouth quite well; salivary secretion natural.

It may be proper to add, that saline purgatives were given daily; and that in both instances the patient was desired not to swallow the saliva after the caustic had been applied.

Since the occurrence of these cases, I have followed the same plan of treatment in inflammation of the fauces, accompanied by enlargement of the tonsils; and although in many instances the disease has been of that acute character in which local depletion is invariably adopted, and which frequently terminates in suppuration,—and although the nitrate was applied in the commencement, unassisted by any other local remedy,—the disease was brought to a speedy termination without any formation of pus taking place. I have also tried the caustic in four cases of scarlatina anginosa, in one of which, occurring in a boy, æt. eight years, the tonsils were so much enlarged, that by a single introduction of the pencil the caustic was applied to both tonsils; and after one repetition, the swelling subsided. In the others, a single application was sufficient to produce a favorable result.

I have hitherto principally alluded to the local advantage to be gained by the employment of this remedy, viz. the removal of the inflammatory affection of the mucous membranes connected with the mouth and fauces. But I consider the speedy termination of increased salivary secretion thus produced, a circumstance of equal, or even still greater importance. Instances occasionally occur in which ptyalism continues, in spite of all treatment, whether local or constitutional, for such a length of time as to reduce the sufferer to a deplorable state of debility, from which he never entirely recovers, although existence may be prolonged for a few years. And in such cases, there is frequently no ulceration, nor even any active inflammation present; or, if in the first instance these circumstances have existed, they are now no longer to be found, the tongue and inner surface of the mouth being only slightly tumid, and the gums spongy. But the salivary glands seem incapable of returning to their natural action; and although the stimulus which caused the inordinate secretion may have been long withdrawn, the habit has been too firmly fixed to be easily eradicated. The draining of saliva continues for months, or even years, producing the lamentable consequences already noticed. The records of pathology also supply us with similar instances, although differently produced. I refer to idiopathic ptyalism—an affection no less obstinate in its course, nor less serious in its effects, than salivation produced by the exhibition of mercury. I have not met with any case of such long-continued affections since I have adopted the method of treatment by nitrate of silver (a period of nearly three years); but a deliberate view of the evidence of its beneficial influence, afforded by those instances in which it has been employed, would, I think, justify a rather sanguine anticipation of its effects in these cases also, in which I should therefore recommend it to be cautiously used.

The manner of employing the nitrate may be collected from the preceding report, with the addition of the following limitations. Should the patient complain of very severe pain, continuing for some hours after the application, this will have arisen from its either having been too freely, or not sufficiently accurately applied. Such being the case, and the disease still continuing, the remedy must not be again resorted to for two or three days. When the ulceration, tumefaction, and salivary secretion, have been considerably lessened by the first application, a repetition may not be necessary; or it will at least be desirable to wait a few days, in which time the affection will frequently have so far subsided as to render the further employment of the nitrate not only useless but decidedly injurious. I have more than once observed the ill effects of persevering too long in this treatment; and I can safely state, that not even the most severe affections will require more than eight or ten applications—seldom so many. The pain is trifling, unless when the application is so freely used as not only to affect the diseased but also the surrounding healthy structures; and there is this variation—that when the tongue, gums, inner surface of the lips, and of the cheeks, are affected, the pain caused by the nitrate is much greater than that produced by its application to the uvula, tonsils, or fauces. In these latter instances the sensation scarcely deserves the name of pain.

These observations are intended to refer to the diseased structures only; for if applied in the same manner to similar parts in a healthy condition, the pain is frequently very acute, the nitrate then acting as an excitant of inflammation, which identical application, in the former instance, produced (however paradoxical it may appear) the subsidence of that inflammation which already existed.

I am fully aware that the nitrate in solution has been frequently recommended in similar affections; but it will be found upon trial to cause as much suffering as when applied in substance: and requiring to be much more frequently repeated, before the desired effect is obtained, constitutes an important objection to this mode of its employment.

*London Medical Gazette.*

---

## REMARKS ON THE USE OF BLISTERS IN PREVENTING ABORTION.

BY LUNSFORD P. YANDALL, M.D.

Abortion is one of the most serious evils incident to a state of pregnancy. Apart from the immediate danger accompanying it, arising out of the tendency to hæmorrhage, it is apt, having occurred more than once, to become a settled action of the system—parturient efforts recur at a stated period, and it is difficult to induce the uterus to bear its burden beyond that period. The hopes of parents are disappointed, and the health of the mother falls ultimately a sacrifice to repeated miscarriages. It is therefore a matter of great moment to correct a habit fraught with so much mischief.

It is well known that the common treatment in such cases is often ineffectual. Bleeding on the access of pains, and especially of hæmorrhage, will sometimes arrest the disposition to abortion, and the prospect of its success is greater as it is more promptly resorted to, and the number of miscarriages has been fewer. The recumbent posture is of the utmost consequence, as well as the avoidance of all mechanical violence, and all excessive mental emotions. Where the habit of the female is nervous, irritable and delicate, much may be done during the intervals between conception, in giving strength and tone to the system, by exercise in the open air, and a departure from the artificial mode of living by which such a habit is formed. If, on the contrary, an undue fulness of the system characterize the patient, the use of purgatives, a vegetable diet, and moderate exercise, may correct the tendency. But where they all fail, and the habit has seemed to have been confirmed, I have known the remedy about to be mentioned succeed in averting a threatened abortion.

A lady in the eighth month of utero-gestation, having enjoyed good health, was seized with profuse hæmorrhage from the womb, without any evident cause, and without premonition. Miscarriage followed in a few hours. Her health was impaired by the premature confinement and loss of blood, and she did not again conceive for a year. Things promised well until she reached the period at which the previous abortion had occurred, when in spite of all the usual means, labor came on, and she was delivered of an eight month's child. In three months she was again pregnant. My attention in the meantime had been attracted to some cases detailed in the Medical Journals of the day, in which blisters were reported to have been effectual in preventing similar accidents. As our patient approached the period of her former miscarriages, she became threatened with the same disaster. A blister was immediately applied just above the knee, and to the sacrum. The relief was prompt and effectual. All pain and uneasiness in the uterine region ceased. As was anticipated, the threatening symptoms recurred after a few weeks, but were again removed by the application of a single blister above the knee, on the inner part of the thigh. A resort to the same remedy, as often as the disposition to abort manifested itself, did not fail to afford relief, and the result was that she carried her child to the full term, and was safely delivered.

A case similar in many respects occurred in the practice of my friend, Dr. Becton, about the same time.

The second case in which I had occasion to employ this remedy was not less striking. Mrs. C. had suffered repeated abortions, and had despaired at last of being delivered of a living child. She was prevailed upon to try the blistering. She applied them only to the knee. The result was eminently satisfactory. Each application gave relief, and she reached the full term in safety.

A lady fell under my care, whose health had suffered from repeated miscarriages in the West Indies, and who had visited this country with the hope that her constitution might be invigorated by a change of climate. At the wonted period of pregnancy, the evil symptoms presented themselves, and there was every appearance that she would give birth prematurely. The remedy, however, which had succeeded so well in former cases, was recommended to her, and was employed with the same signal success. She returned to her home in a few months afterwards, the mother of a healthy child.

The result of the above cases is given to the profession, as tending to confirm the value of a remedy not extensively in use. I cannot believe that its apparent success was in any degree accidental in these cases, nor in the other cases published in the journals of this country which led me to apply it. If it should prove equally efficacious in the hands of other practitioners, its general introduction into practice must be attended with great good.

Before closing this brief notice, I will state, as a fact relating to a kindred subject, that in some cases of pruritus I have found frequent washings with tepid water more successful than any other application. It has given relief from the distressing sensation, after cold water, ice, borax, acetate of lead, and the whole round of astringent lotions, had been used ineffectually.

*Transylvania Journal of Medicine and the Associate Sciences.*

# REMARKS ON THE EMPLOYMENT OF THE FORCEPS IN OBSTETRICS.

BY S. COATES, M.D. OF GOOCHLAND CO. VA.

[Communicated for the Boston Medical and Surgical Journal.]

It must be admitted to be an improvement in the practice of medicine, when, for remedial agents very liable to dangerous consequences, we become able to substitute others less hazardous, and at the same time capable of accomplishing as much, or having similar good effects, when the employment of both is attended with success. Such appear to me to be the comparative merits of the forceps, and the secale cornutum or ergot, in difficult parturition; the ergot, in many cases, being sufficiently efficacious in aiding the parturient powers of the uterus, should supersede the use of the forceps, when we take into consideration the many deplorable accidents that have followed the employment of these instruments. Dr. Gooch, in his Lectures on Midwifery, submitted this important inquiry, while illustrating his ideas on the subject: "When are you to use the forceps, and when are you not to use them? If the patient suffers from exhaustion, or from peritoneal or vaginal inflammation, no man would hesitate a moment on the propriety of applying them. If you apply the forceps merely because you think that the labor will not be completed naturally, it is an evil; but should you permit the occurrence of the injuries of protracted labor, by withholding assistance, it is a much greater evil. You can never allow the symptoms of exhaustion, of inflammation of the peritoneum or vagina, to take place, without the risk of its proceeding so far as to be beyond the control of art. But do not think that I recommend the employment of instruments unnecessarily; for they are an evil, and are never introduced into the vagina without some hazard." The forceps cannot be employed with any prospect of success without sufficient space for the passage of the fœtal head, and without the necessary dilatation of the soft parts—circumstances which are essential to the use of the ergot. This fact being admitted, we proceed to an examination into the merits of the two remedial agents proposed.

When art is required merely to excite the uterus to increased action, the forceps readily accomplish the indication, but not without the risk of laceration of the perineum, inflammation, gangrene, and the sloughing of the vagina—deplorable results, even if death itself should not follow. Under similar circumstances, the ergot, properly administered, may effect the desired object, without the danger of such consequences—consequences to which the employment of the forceps is ever liable. That the forceps, in cases of difficult parturition, have frequently been employed with success, and entire safety both to the mother and child, no well-informed accoucheur would pretend to deny; nor, on the other hand, can it be disputed that their employment has often been followed by some one of the accidents which I have mentioned, when, perhaps, the sole indication was to increase the parturient powers of the uterus, which object might have been safely accomplished by the use of the ergot.

To obviate the evils arising from the use of instruments, would it not be the most prudent measure to employ them only in those cases in which they appear to be the last resort? So far from utterly condemning the use of the forceps, and wishing them to be entirely dispensed with in the practice of obstetrics, I most willingly admit that they are sometimes urgently demanded by particular circumstances, such as convulsions and hemorrhage, which require that we run the risk of the accidents liable to follow the employment of instruments, or submit to a far greater evil. If there is sufficient space for the head of the fœtus to pass, together with the forceps, what is there to prevent the same body from passing alone under the influence of the necessary parturient efforts of the uterus? When the uterine energies are deficient, and the labor does not progress from any other cause, should not the ergot be used before it is determined to have recourse to the forceps, and thus perhaps unnecessarily run the risk of rendering the life of the patient a life of misery and despair?

The want of confidence in the ergot appears to be one of the causes why it has not been more frequently employed. Its influence over the gravid uterus has been denied by authority worthy of particular regard; while it is contended by eminent and experienced authors, that this article exerts such an influence over the uterus, as not only to excite it to expel the fœtus when there is a deficiency of action in this organ, but even to cause serious injury when due regard is not paid to the dimensions of the pelvis, and to the dilatation of the os uteri, without which preliminary measures the child may be destroyed or the womb may be ruptured. "The Americans," it was said by Dr. Gooch, "recommend the ergot of rye, in doses of half a drachm or two scruples, and affirm that the uterus is almost immediately excited by it to a vigorous action." He added, "I never used it, neither do I credit what has been said respecting its efficacy." This is an assertion made without any experience whatever with this valuable article; an assertion which should not have equal influence with one founded upon experimental knowledge. The editor of Gooch's Compendium of Midwifery speaks thus of the ergot. "I have had many opportunities of putting this remedy fairly to the test, by administering it in cases, the tediousness of which I had been led to anticipate, by my attendance on the same women in former labors, which were exceedingly protracted from a sluggish and ineffectual action of the uterus. I have repeatedly given the ergot in half drachm and two scruple doses; I have given it both in powder and in infusion; and I never witnessed in any one instance the slightest benefit from it." In an essay published in the Bulletin Général de Therapeutique we have the highest recommendations on the use of the ergot in menorrhagia and meteorrhagia. It is stated that the dose may, without danger or inconvenience, be carried to several drachms in the course of four or five days; that we need be under no apprehension of commencing with a drachm, divided during the first twenty-four hours. The experience of many eminent American physicians has long ago proved that the ergot is a most valuable agent in difficult parturition. But from the great discrepancy of opinion as to the effects of this article, it is evident that experiments with it have not been fairly made; that perseverance in its employment, perhaps, has not been carried to the necessary extent. Would repeating and increasing its dose be more rash than hastily resorting to the application of the forceps merely to assist deficient parturient powers? Eulogies on the successful employment of the ergot in difficult parturition, are daily pronounced by able practitioners; and were it more frequently used, we may believe there would be fewer women compelled to seclude themselves from society, and pass their lives in misery, from the too hasty and rash employment of the forceps.

The dose of this medicine, as usually prescribed, is a scruple of the powder, and of the infusion a tablespoonful, but much larger doses might be safely given.

Believing that much good may be accomplished by substituting the ergot for the forceps in many cases of parturition, and that more satisfactory experiments with it are yet to be made, I doubt not the experience of those physicians who have given it a fair trial would be highly pleasing to the members of the profession generally.

Usus et Experientia dominantur in artibus.

*April*, 1834.

---

## HYDRIODATE OF POTASS IN DROPSY.

*To the Editor of the Boston Medical and Surgical Journal.*

Sir,—In your Journal of the 7th inst. there are two cases of dropsy detailed as having been cured by the use of the Hydriodate of Potass. I am glad that it is in my power to unite my testimony as to the efficacy of Iodine in cases of general dropsy; I have but one case, however, as yet, which I can with certainty allude to—which is in the person of Mrs. Kelsey, for some time an invalid, made so by anasarca.

I was first called to see her for bad eyes. I found her laboring under eutropion, caused by the infiltration of serum into the cellular substance of the lids, which produced an inversion of the tarsus. The cause of the difficulty was apparent from the general appearance of the body. I at once determined to give iodine, being convinced that there was induration of the liver, and that there existed a diseased state of the mesenteric glands. The dose was eight drops of the tincture three times a day to commence with, gradually increasing the amount until it produced nausea; the object being to take as much as the stomach would receive and retain.

Mrs. Kelsey is about fifty years of age. In the course of three weeks from the time I was called, the dropsical symptoms had vanished so far as to leave the lids in a natural state; the eyes consequently were relieved from the irritation of the inverted lids, and speedily became well.

So far as my experience goes, I am of the opinion that iodine loses its effects on the system after being freely used for two or three weeks; an intermission of a week being necessary to render the system accessary to its remedial virtues.

I hope to see other confirmation of the efficacy of this medicine, in cases of anasarca. Hitherto it has been a difficult disease to manage; cathartics have generally been prescribed, but they leave the patient in a feeble state. I have found iodine to act as a tonic rather than as a debilitating remedy. I am yours, &c. **Richard S. Kissam.**

*Hartford, Ct. May* 10, 1834.

---

## MEDICAL USE OF THE PRUSSIATE OF IRON.

*To the Editor of the Boston Medical and Surgical Journal.*

Sir,—I noticed some time since in a Number of your Journal, an article mentioning the use of the Prussiate of Iron as a remedy in profuse and irregular catamenial discharges, which are prone to occur near the period of their cessation. It occurred to me at the time, that the above, according to its effect noticed in the article, might be a valuable remedy, and one which is much needed. I presume there may be many of your subscribers or correspondents who are acquainted with the therapeutic application and effects of the remedy in question. If so, will not some one give the result of his experience to the profession through the medium of your useful Journal? He may, by so doing, confer a benefit on many suffering individuals; he will at least satisfy the inquiries of

*May* 1, 1834. **A Subscriber.**

---

## THE RATIONALE OF A PANACEA.

If the reader has sufficiently recovered from the effects of the counterblast which we recently quoted from the diary of "An Old Man," he may not perhaps be displeased with one or two more Bubbles from the Brunnens of Nassau.—Let us follow our dyspeptic to the promenade of simple Langenschwalbach.

"As I looked," continues our traveller, "at the various figures and faces, I could not help feeling that it was quite impossible for the Goddess Pauline to cure them all. There is a tall, gaunt, brown, hard-featured, lantern-jawed officer *à demi solde*—the sort of fellow that the French call '*un gros maigre*'—drinking by the side of a red-faced, stuffy, dumpy, stunted little man, who seems framed on purpose to demonstrate that the human figure, like the telescope, can be made portable. What in the whole world can be the matter with that very nice, fresh, healthy-looking widow? or what does that huge, unwieldy man, in a broad-brimmed hat, require from the Pauline? (surely he is already about as full as he can hold!) That poor, sick girl has just borrowed the glass from her aunt. Can the same prescription be good both for her and her withered, wrinkled skinny, scraggy duenna? A couple of nicely-dressed children are extending their little glasses to drink the water with milk; and see! that gang of countrymen, who have stopped their carts on the upper road, are racing and chasing each other down the bank to crowd round the brunnen! Is it not strange that in such a state of perspiration they can drink such deadly cold water with impunity? But this really is the case; whether it be burning hot or raining a deluge, this simple medicine is always agreeable, and no sooner is it swallowed than, like the fire in the grate, it begins to warm its new mansion.

"Such was the scene daily witnessed. All the drinkers seemed to be satisfied with the water, which can have only one virtue—that of strengthening the stomach—yet it is this solitary quality which has made it a remedy for almost every possible disorder of body and mind; for though people with an ankle resting on a knee, sometimes mysteriously point to their toes, and sometimes very solemnly lay their hands upon their foreheads, yet I firmly believe that almost every malady of the poor human frame is, either by highways or byways, connected with the stomach:—

'The *woes* of every other member
Are founded on your belly-timber;'

and I must own I never see a fashionable physician mysteriously consulting the pulse of his patient, or, with a silver spoon on his tongue, importantly peering down his throat, but I feel a desire to exclaim—'Why not tell the poor gentleman at once, Sir, you've eaten too much, you've drunk too much, and you've not taken exercise enough?' That these are the real causes of every one's illness, there can be no greater proof than that those savage nations who live actively and temperately have only one disorder—death! The human frame was not created imperfect—it is we ourselves who have made it so—there exists no donkey in creation so overladen as our stomachs, and it is because they groan under the weight so cruelly imposed upon them, that we are seen driving them before us in such herds to one little brunnen."

The above reminds us of Voltaire's definition:—"A physician is an unfortunate gentleman who is every day requested to perform a miracle—namely, to reconcile health with intemperance."

## THE SERPENT'S BATH.

FROM the same work we copy the following account of the discovery of another favorite brunnen, called Schlangen-bad, i. e. the Serpent's-bath.

"ONCE upon a time," it seems, "there was a heifer, with which everything in nature seemed to disagree. The more she ate the thinner she grew—the more her mother licked her hide, the rougher and the more staring was her coat—not a fly in the forest would bite her—never was she seen to chew the cud—but, hide-bound and melancholy, her hips seemed actually to be protruding from her skin. What was the matter with her no one knew—what could cure her no one could divine—in short, deserted by her master and her species, she was, as the faculty would term it, given up.

"In a few weeks, however, she suddenly reappeared among the herd, with ribs covered with flesh—eyes like a deer—skin sleek as a mole's—breath sweetly smelling of milk—saliva hanging in ringlets from her jaws! Every day seemed to confirm her health; and the phenomenon was so striking, that the herdsman, having watched her, discovered that regularly every evening she wormed her way in secret into the forest, until she reached and refreshed herself at a spring of water—haunted by harmless *serpents*, when full grown about four feet in length.

"The circumstance, it seems, had been almost forgotten by the peasant, when a young Nassau lady began to show exactly the symptoms of the heifer. Mother, sisters, friends, father, all tried to cure her, but in vain; and the physician actually

'Had taken his leave with sighs and sorrow,
Despairing of his fee to-morrow,'

when the herdsman happening to hear of her case, prevailed upon her at last to try the heifer's secret remedy; she did so, and, in a very short time, to the utter astonishment of her friends, she became one of the stoutest young women in the duchy. What had suddenly cured one sick lady was soon deemed a proper prescription for others, and all cases meeting with success, the spring gradually rose into notice and repute. I may observe, by-the-by, that even to this day horses are brought by the peasants to be bathed; and I have good authority for believing, that, in cases of slight consumption of the lungs (a disorder common enough among horses), the animal recovers his flesh with surprising rapidity. Nay, I have seen even pigs bathed, though I must own that *they* appeared to have no other disorder except hunger."

---

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 21, 1834.

## VARIETIES OF SIZE IN THE HUMAN RACE.

M. Geoffroy St. Hilaire concludes a very interesting memoir on the variations of size in animals of the same species, by laying down the following principles.

### *In the Mammifera.*

1. Whenever two or more species of mammifera are perfectly similar in their general characters, their size is the same or very little different.

2. Families, genera, and species, which live in the water, or which pass there a considerable part of their lives, reach a great size compared with other families, genera, species, of the same group; and the increase of their dimensions is even the greater, other things being equal, in proportion as their organization renders them more essentially aquatic.

3. The winged genera, or those living on trees, attain, on the contrary, only very limited dimensions.

4. The purely terrestrial mammifera may be classed in the following order, according to their size—very great in the first, less in the second, and so on: the herbivora, the carnivora, the frugivora, and finally the insectivora.

5. This proposition may in some sort be replaced by the following: there exists a perfect cöordination between the volume of animals, and the volume or quantity of organized beings on which the conformation of their digestive apparatus leads them to feed.

6. There exists a relation not less constant between the size of mammifera, and the extent of the places where they live; the large species inhabiting the sea, continents, and large islands; small ones, the rivers and the small islands.

7. In general, the mammifera of the large continents surpass the analogous species of continents less extended.

8. The mammifera of the northern hemisphere surpass the analogous animals living in the southern.

9. The size of the mammifera which live on the mountains, is most generally, but not always, inferior to that of the analogous animals which people the plains and the deserts.

10. In the northern hemisphere the genera and species of most families arrive at their maximum of size in the most southern countries, and descend to their minimum in the most northern; others have their maximum in the regions near the arctic circle, and their minimum in the torrid zone; but there exist none which, having their larger species in the temperate or moderately warm climates, present a less size in proportion as they are followed toward the equator or toward the poles.

11. The preceding propositions, true almost without exception in regard to the mammifera, lose more or less of their generality in proportion as they are applied to classes placed lower in the scale of beings, and terminate in regard to the animals most removed from man, by becoming general views, still applicable to the totality of the cases, but submitted to numerous exceptions.

12. It is also to be remarked, that the variations of size in any one class, other things being equal, are included in more narrow bounds, in proportion as this class is more natural.

13. Finally, when a class is found composed of beings whose growth continues during a great part of life, and which are reproduced before having completed their development, the variations of size are very considerable, and included within loose and general limits.

### *In Domestic Animals.*

14. The preceding propositions are far from being generally applicable to the domestic animals.

15. In several domestic species the primitive size has been preserved, or only very slightly modified.

16. In other species there exist races much larger, and others much smaller, than the primitive type: but the mean size of the races differs little if at all from this type; so that the species considered in its totality, has in fact increased or diminished very little.

17. The species which have undergone a slight diminution, are all in the number of those which man generally neglects and feeds insufficiently.

18. The individual differences of size are included in much more narrow limits than the variations of race.

### *In the Human Race.*

19. Contrary to what takes place in domestic animals, the variations of race in man are included within much more narrow limits than the individual variations.

20. The size of women is less variable than that of men. Thus they are much smaller than men in people of large size, and the difference becomes insignificant in people of small stature.

21. The nations most remarkable for their large size, inhabit generally the southern hemisphere; those of smaller size, on the contrary, being found almost wholly in the northern, as has been long since remarked.

22. Among those people of very large size, some live on the continent of South America; others in the different Archipelagoes of the South Sea; and we may even remark, that they form in the southern hemisphere two series, the one continental, the other insular, both rather irregular and often interrupted, but equally commencing at 8° or 10° S., and terminating at about 50°.

23. There exist, however, in the southern hemisphere, also, nations whose size is below the mean; and reciprocally in the northern, nations whose size surpasses this mean. Now, in comparing the geographical position of these nations with that of those extremely large or extremely

small, we arrive at this result, paradoxical in appearance, and yet easy to explain in part, that nations of small size live almost everywhere near the largest nations of the whole world; and reciprocally, nations of large size near those the most remarkable for the smallness of their stature.

24. The variations in the size of races are explained, but in part only, by the influence of climate, dietetic regimen and kind of life.

25. It is at least extremely probable that the size of the human race, notwithstanding some local variations, has not sensibly diminished; and this not only as so many kinds of proofs establish it, and as it is usually known since the first historical ages, but ever since the most ancient epoch we can conceive in the life of the human race, science being able to supply in regard to this often controverted question the absence of every monument, and to go back beyond every historical epoch.

In developing the nineteenth principle above stated, M. St. Hilaire remarks, that confining ourselves to the circle of the best authenticated facts, we find the height of the smallest dwarfs to be to that of the tallest giants exactly 1 : 4; and consequently supposing them well proportioned, the mass of the bodies of the first is to that of the second as 1 : 64. The mean height of the smallest races and that of the largest, whose existence is authentic, are, on the contrary, 1 : 1 1-2, and consequently the mass of the body compared in both, nearly 1 : 3 1-2.

This difference of extent presented by the variations of human size in races and in individuals, may be expressed in a manner perhaps still more striking by other numerical results.

In fact, the number which expresses the mean height of the largest of the human races, being augmented by one half, gives almost exactly the size of the largest giants, respecting whose authenticity no doubt exists.

Thus by calling 1 the height of the smallest race, that of the smallest dwarf will be 1-2. And by calling 1 the height of the largest race, that of the tallest giant will be 1 1-2.

The following tables, which this distinguished naturalist professes to have derived from comparing extensively the accounts furnished by travellers, furnish the most important facts on which the above calculations are founded.

## *Synoptical Tables of the principal Variations of Size in the Human Races.*

### TABLE I. NATIONS REMARKABLE FOR THEIR LARGE SIZE.

| Names. | Height. | Region. | Climate. | Race. | Authors. |
|---|---|---|---|---|---|
| Patagonians. | 6 0 | 45 to 50° S. | Rather cold. | American. | |
| do. | 5 10 | do. | do. | do. | |
| Navigator's Islands. | 5 10 | 14° S. | Warm. | Malay. | La Perouse. |
| Caraibs. | 5 9 | 8 to 10° S. | Very warm. | American. | Humboldt. |
| Patagonians. | 5 8 | 45 to 50° S. | Rather cold. | do. | Bougainville. |
| Inbayas. | 5 8 | 20 to 21° S. | Warm. | do. | Azara. |
| New Zealanders. | 5 7 | 35 to 45° S. | Somewhat warm. | Malay. | Lesson. |
| Otaheitan Chiefs. | 5 6 | 17° S. | Very cold. | do. | Lesson. |
| Marquesas Islands. | 5 6 | 10° S. | Very cold. | do. | Marchand. |
| Patagonians. | 5 5 | 45 to 50° S. | Rather cold. | American. | Cook. Wallis. |

In developing proposition 23, M. St. Hilaire observes that in the southern hemisphere, the Terra del Fuego, separated from Patagonia only by the Straits of Magellan, and the New Hebrides, placed at a little distance from the Navigator's Isles, are inhabited by small and ill-made men. Reciprocally in the northern hemisphere, the nations of Sweden and Finland, which bound on Lapland, are of a height superior to the mean.

TABLE II. NATIONS REMARKABLE FOR THE SMALLNESS OF THEIR SIZE.

| Name. | Height. | Region. | Climate. | Race. | Authors. |
|---|---|---|---|---|---|
| New Holland. | 4 11 | 35° S. | Warm. | Ethiopian. | Quoy and Gaimard. |
| Vanikoro. | 4 10 1-2 | 12° S. | Warm. | do. | do. |
| Orotchys Tartars. | 4 10 | 51° N. | Very cold. | Mongolian. | Laperouse. |
| Kamtschadales. | 4 10 | 50 to 60° N. | do. | do. | do. |
| Papons. | 4 7<br>4 10 | Equator. | Very warm. | Ethiopian. | Garnev and Lesson. |
| Arctic inhabitants. | 4 6 | 60 to 75° N. | Very cold. | Mongolian. | Laperouse. |
| Esquimaux. | 4 0 | 70° N. | do. | do. | Hearn. |
| Boschimans. | 4 0 | 30° S. | Rather warm. | Ethiopian. | Barrow. |

From these facts, sufficiently remarkable in themselves, two consequences, in some sort opposite, may be deduced : one, that the influence of climate on the size of the races of men is real and incontestable ; the other, that this influence is often modified, and as it were annulled, by the action of divers causes.

In fact, on the other hand, it is impossible to controvert the fact, long since admitted in science, that very severe cold tends to arrest in man the development of the size, and on the contrary moderate cold is favorable to it. We see that not only in the northern hemisphere, all the nations of the coldest climates of Europe, Asia, and America, the Laplanders, Samoyedes, Esquimaux, &c. are of very small size, but that likewise in the southern hemisphere, the nations of very cold countries, as those of Terra del Fuego, are very small.

We see on the contrary that in almost all countries which can be called cool, in comparison with France, the people are generally of tall stature; such are in the northern hemisphere the Swedes and Finlanders, to whom may be added the Saxons, the inhabitants of Ukraine, and several other nations or people of Europe, Asia, and N. America—and especially in the southern hemisphere, the Patagonians.

We may find similar relations by comparing together the inhabitants of the different regions of the high intertropical mountains, each of which represents in miniature a whole hemisphere, in which we may distinguish a torrid, a temperate, and a frigid zone. The inhabitants of the plains at a small elevation are generally large and robust ; whereas we find only men of small stature in the higher regions near those cliffs, desert as the pole, and like it also covered with eternal ice. In the mountains of temperate, and especially of cold climates, the size of those living on the plains at a small elevation, diminishes rapidly by reason of the marked reduction of the temperature.

Some farther remarks by the same author, on another branch of this interesting subject, will be noticed in a future number.

---

## APPLICATION OF WHITE LEAD TO BURNS AND SCALDS.

Dr. Hannay, in a note to the *Lancet*, speaking of the efficacy of this application, says, The substance I use is the common white paint used for out-door painting, made to the consistence of a poultice by linseed oil, and spread a quarter of an inch thick on coarse linen applied to the injured part. I have always found it give immediate relief, and if applied before vesication has taken place, I have never seen blisters arise after the application.

In one case a slight rigor took place immediately on the cold lead touching the skin, but it went off in a few minutes, and the little sufferer was quite free from pain in ten minutes, though she had been scalded from midway between the umbilicus and pubis to the knees.

Some practitioners to whom I have recommended the lead poultice have objected to it from fear of absorption of the lead; but I have never seen symptoms of colica pictonum in any of the patients to whom it was applied, nor do I think it likely that a burnt or scalded surface would absorb the lead, as the extravasated fluid in a vesicle remains a long time without being absorbed. I may remark, that where vesication was likely to take place, desquamation of the cuticle followed in about eight or ten days after the accident, but the skin was perfectly healthy beneath. I have likewise found it necessary to raise the edge of the poultice when it became dry and hardened, and lay on a little boiled linseed oil with a feather; but this has seldom to be done more than once or twice. I think this treatment applicable to all kinds of burns, whether there may have been so much heat as to produce merely a red blush upon the surface, in which case the sedative effect of the lead appears to allay the irritation, or where the heat may have been so great as to produce vesication, or even disorganization, of the cutaneous texture itself.

*Monthly Archives of the Medical Sciences.*

---

*Responsibility of Medical Men in France.*—Doctor T., in bleeding M. G., pricked the brachial artery. The bystanders observed the unusual color of the blood and wished to keep it; to this the operator was opposed, and threw the blood out of the window. He afterwards used no means to prevent aneurism. Four months after, another surgeon tried the ligature *four times* without effect, and, gangrene coming on, he was obliged to amputate the limb. The case came before the Tribunal of Evreux, in action by G. against Doctor T. The sentence of the court is as follows:—

"1. That in bleeding the arm of G. the Doctor T. opened an artery called the brachial.

"2. That T. should have recognized this serious accident immediately.

"3. That, nevertheless, he neglected, in order to conceal it, to put into immediate practice the only means pointed out by medical men, that is, compression by the application of a hard body, restricting himself to a simple bandage.

"4. That in this condition G. was left to himself for several days.

"5. That the aneurism, a necessary consequence of the puncture of the artery, being manifested, T., instead of following the suggestions ('*inspirations*,') or prescriptions of his art, that is, instead of attempting the operation which consists in the application of the ligature, had employed resolutives which could have no useful result.

"6. That in consequence the demand of G. be admitted, that the Dr. T. be condemned to pay to the said G., within eight days, a sum of 600 francs, and to pay him annually, dating from the commencement of the action, for life, a sum of 150 francs, payable every six months."

Many remarks adverse to the decision are made by the editor of the *Journal Hebdomadaire des Progres des Sciences.* The name of the unsuccessful attemptor of the operation of the ligature does not once occur.

*Ibid.*

*Connecticut Medical Society.*—At the annual meeting of the President and Fellows of the Connecticut Medical Society, held in New Haven, May 14th and 15th, 1834, the officers for the ensuing year were elected as follows, viz. :—

Thomas Miner, of Middletown, *President.*
Silas Fuller, of Columbia, *Vice President.*
Elijah Middlebrook, of Trumbull, *Treasurer.*
Charles Hooker, of New Haven, *Secretary.*

Silas Fuller, Luther Ticknor, Dyer T. Brainard, William S. Pierson, and Joseph Palmer, *Committee of Examination.*

George Sumner, Rufus Blakeman, Milo L. North, Andrew Harris, and Gaylord Welles, *Committee to nominate Professors for the Medical Institution.*

Thomas Hubbard, Eli Ives, John S. Peters, William Buel, and Samuel Carter, *Committee to nominate a Physician of the Retreat for the Insane.*

Lloyd Seeley, Remus M. Fowler, Samuel Punderson, Benjamin F. Stoddard, Abijah Ladd, Joseph Barratt, Hiram Holt and Milo L. North, were recommended to the President and Fellows of Yale College, as candidates for the honorary degree of Doctor in Medicine.

Dr. Samuel Henry Dickson, of Charleston, S. Carolina, was elected an honorary member. *Extracted from the Records.*

Test, CHARLES HOOKER, *Secretary.*

*Smallpox.*—The Exeter News Letter states that much alarm has been excited in Manchester, in the County of Hillsboro', N.H., in consequence of the appearance of the smallpox in that town. Two elderly people have already fallen victims to it.

Whole number of deaths in Boston for the week ending May 17, 21. Males, 11—Females, 10.

Of inflammation of the bowels, 1—dropsy on the brain, 2—abscess, 1—old age, 1—disease of the head, 1—consumption, 2—infantile, 1—lung fever, 2—croup, 1—intemperance, 1—cancer of the uterus, 1—suicide, 1—smallpox, 1—scarlet fever, 2—disease on the brain, 1.

## ADVERTISEMENTS.

THE Subscribers continue to give instruction in the various branches of a MEDICAL EDUCATION, to such students as may place themselves under their direction.

They have provided a room for the pupils, which will be open every day, Sundays excepted. The course of study is pointed out, the necessary books are furnished, and examinations are frequently made. Facilities are [illegible] for the cultivation of practical anatomy.

The [illegible] are $100 [illegible] a year, $75 for six months, and $50 for a quarter. All payments to be made in advance.

The students, in addition to the private instruction, have the privilege of attending, gratuitously, the Medical and Surgical Practice and the Surgical Operations of the Massachusetts General Hospital, and generally private Surgical operations, during the period of their pupilage; and they will also have free admission to the Lectures on Anatomy and Surgery, delivered at the Medical School of Harvard University. Clinical Lectures on Surgery are occasionally given.

Board, in respectable families in the city, may be had at three dollars a week.

JOHN C. WARREN,
GEORGE HAYWARD,
*Boston, May*, 1834. May 7. eop6t. ENOCH HALE, JR.

---

SURGICAL INSTRUMENTS.

AN assortment of Surgical Instruments for sale at No. 35 Washington Street, five doors south of Cornhill, by A. P. RICHARDSON.

Surgical Instruments made and repaired as above. Orders forwarded will meet with punctual attention. Feb 19 ep

THE BOSTON MEDICAL AND SURGICAL JOURNAL is published every Wednesday, by D. CLAPP, JR. at 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *post-paid.* It is also published in Monthly Parts, on the 1st of every month, each Part containing the weekly numbers of the preceding month, stitched in a cover.—Price $3,00 a year in advance, $3,50 after three months, and $4,00 if not paid within the year.—Every seventh copy, *gratis.* —Postage the same as for a newspaper.